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Drug Deaths by Year

2011	201
2012	163
2013	198
2014	342
2015	444
2016	486
2017	490
2018	471
2019	415
2020	417
2021	436

Summary Of 2021 NH Drug Overdose Deaths

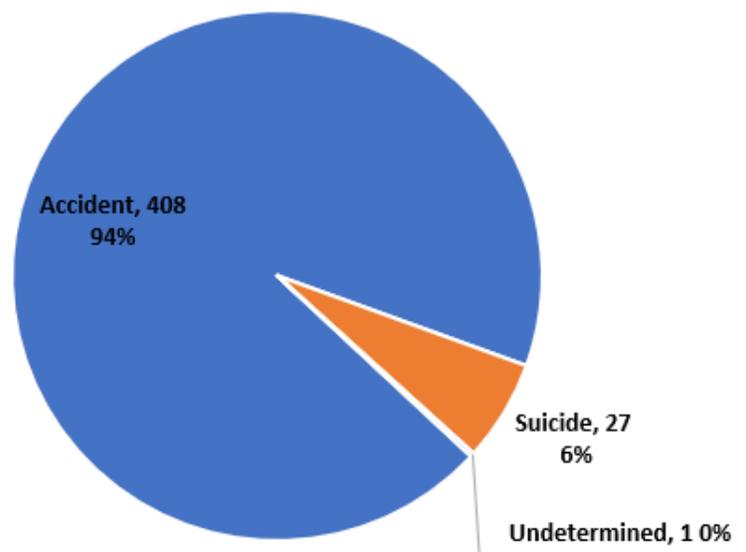
In 2021, 1794 deaths fell under the jurisdiction of OCME. Autopsies were performed on 607 (34%) of the decedents and the remaining 1187 decedents received external exams along with toxicology testing for most of them.

436 (24%) of all the 2021 deaths investigated by OCME were due to drug overdoses and are the subject of this review. Autopsies were performed on 258 (59%) of them.

Of the 436 drug overdose deaths in NH, 408 of these deaths were accidents, 27 were suicides and there was 1 death where the manner of death could not be determined (Fig. 1).

“Undetermined” is the term used when there is insufficient information to determine the manner of death. For drug deaths, this term is typically used when it is unclear if the death resulted from an intentional or an unintentional overdose.

Figure 1. Number of drug deaths by manner of death





2021 Drug Summary

Table 1 shows the number of drug deaths by manner of death for each drug category. Drug categories, defined below, are derived from the specific drug(s) determined to be the cause of death as listed on the death certificate. They do not represent all drugs detected by toxicology testing. The vast majority of drug deaths result from unintentional overdose of opiate/opioid drugs. Opiates are drugs derived naturally from the opium poppy plant (e.g. morphine, codeine) whereas opioids are drugs synthesized from opiates (e.g. heroin, hydrocodone, oxycodone, buprenorphine) or synthesized de novo (e.g. methadone, fentanyl). All opioid drugs exert their effects by binding to opioid receptors in the body. Fentanyl is available both as a prescription pain medication and as an illicit drug. Based on information obtained from death investigations, the vast majority of fentanyl deaths are caused by non-pharmaceutical fentanyl.

DRUG(S)	Accident	Suicide	Total
Fentanyl alone	201	0	201
Fentanyl and Other Drugs	73	1	74
Fentanyl and Methamphetamine	42	0	42
Fentanyl and Cocaine	20	0	20
Methamphetamine alone	15	1	16
Methamphetamine and Cocaine	0	0	0
Cocaine alone	11	0	11
Fentanyl, Methamphetamine, Cocaine	5	0	5
Other Opiates/Opioids	28	7	35
Total Deaths Caused By Opiates/Opioids	395	9	404
Other drugs	11	17	29*
Unknown Drugs	3	0	3
Total Drug Deaths	409	26	436

Table 1. Number of drug deaths by manner of death and drug category

*There was one death due to "Other drugs" in which the manner of death could not be determined.

Fentanyl Analogues

Fentanyl analogues are synthetic opioid drugs with a chemical structure similar to fentanyl that may be more or less potent than fentanyl. The following fentanyl analogues were detected in drug overdose deaths in 2021:

Acetyl fentanyl (11)

Para-fluorofentanyl (21)

Alcohol

Alcohol is a drug and is included in the overdose statistics. In 2021, acute intoxication by alcohol alone caused 2 deaths and alcohol contributed to 54 other overdose deaths.

Definitions:

- **Fentanyl and Other Drugs:** Fentanyl in combination with any other drugs, excluding methamphetamine or cocaine caused the death.
- **Fentanyl and Methamphetamine:** Fentanyl and methamphetamine, with or without other drugs, excluding cocaine caused the death.
- **Fentanyl and Cocaine:** Fentanyl and cocaine, with or without other drugs, excluding methamphetamine caused the death.
- **Methamphetamine and Cocaine:** Methamphetamine and cocaine, with or without other drugs, excluding fentanyl caused the death.
- **Fentanyl, Methamphetamine, Cocaine:** All three drugs, together or in combination with any other drugs, caused the death.
- **Other Opiates/Opioids:** An opiate/opioid other than fentanyl (e.g. methadone, oxycodone, buprenorphine), alone or in combination with any other drugs, excluding methamphetamine and cocaine caused the death.
- **Other drugs:** Non opioid/opiate drugs excluding methamphetamine and cocaine caused the death.
- **Unknown Drugs:** An unknown drug or drugs caused the death. This category may be used when a person overdoses and survives in the hospital for a period of time prior to death. Hospital toxicology testing may not be performed or may not detect the drug(s) used. If the hospital admission specimens are discarded prior to the death then more comprehensive toxicology testing cannot be performed.



2021 Drug Summary

Illicit stimulant drugs (e.g. cocaine, methamphetamine) are also included in the overdose statistics but deaths due to stimulants alone are relatively rare and usually involve extremely high levels or coexisting heart disease or other significant natural disease.

Table 2 and Figure 2 show the number of drug deaths due to methamphetamine with or without other drugs for the years 2012 through 2021. Table 3 and Figure 3 show the number of drug deaths due to cocaine with or without other drugs for the years 2012 through 2021. Most deaths involving cocaine and methamphetamine also include an opioid, namely fentanyl. While methamphetamine related deaths continue to increase every year, cocaine related deaths have fallen in recent years.

Year	Total # of Deaths Involving Methamphetamine	Solely Methamphetamine	Methamphetamine and Opioid(s)	Methamphetamine and other drug(s) (non-opioids)
2021	63	14	47	2
2020	59	11	44	4
2019	52	6	46	0
2018	22	4	17	1
2017	14	2	11	1
2016	13	4	8	1
2015	2	1	1	0
2014	3	0	3	0
2013	2	1	1	0
2012	1	0	1	0

Table 2. Methamphetamine related deaths 2012-2021

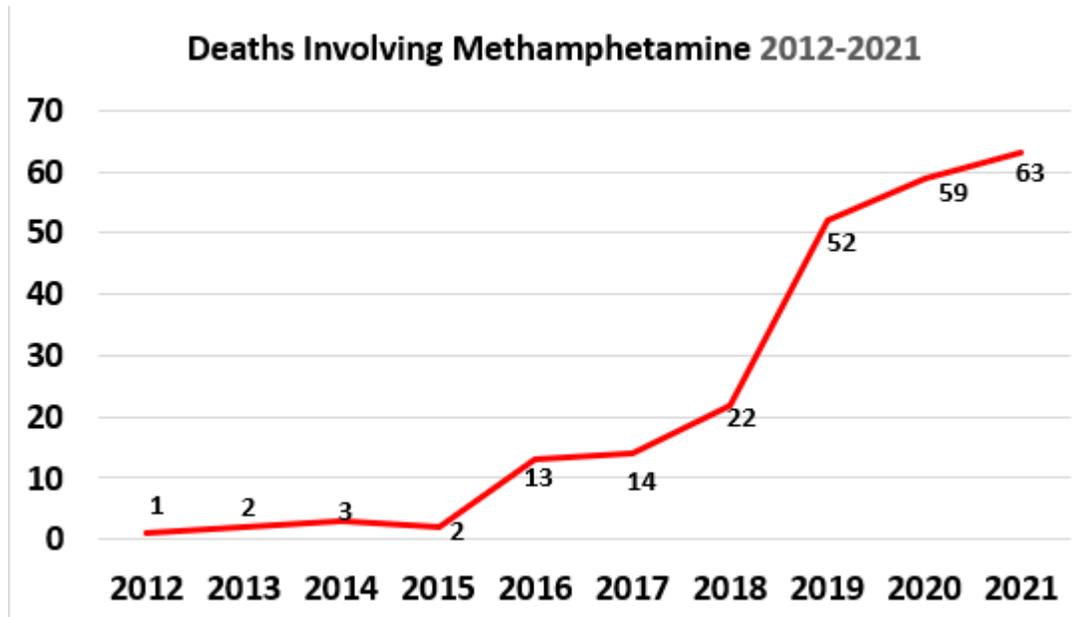


Figure 2.
Methamphetamine
related deaths
2012-2021



2021 Drug Summary

Year	Total # of Deaths Involving Cocaine	Solely Cocaine	Cocaine and Opioid(s)	Cocaine and other drug(s) (non-opioids)
2021	36	11	25	0
2020	58	8	48	2
2019	79	5	73	1
2018	65	5	57	3
2017	51	5	44	2
2016	66	14	50	2
2015	48	5	43	0
2014	42	5	35	2
2013	34	1	24	9
2012	20	4	14	2

Table 3. Cocaine related deaths 2012-2021

Deaths Involving Cocaine 2012-2021

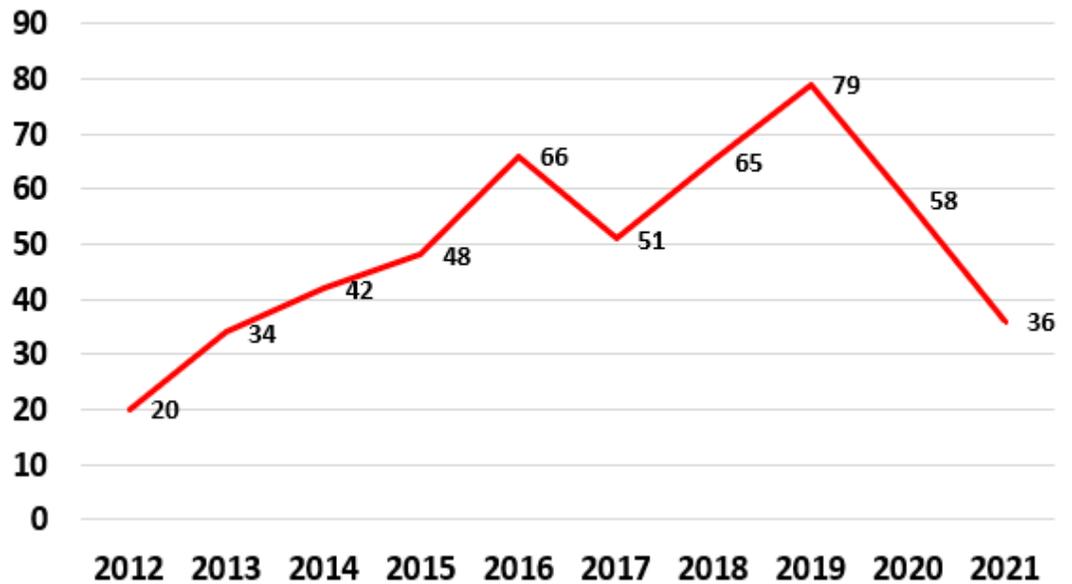


Figure 3. Cocaine related deaths 2012-2021



2021 Drug Summary

Figure 4 shows the number of drug deaths by age group and manner of death. The highest number of accidental overdose deaths occurred in 30 to 39 year olds. Only one undetermined overdose death occurred in 2021. Not included are three fetal deaths due to maternal drug use.

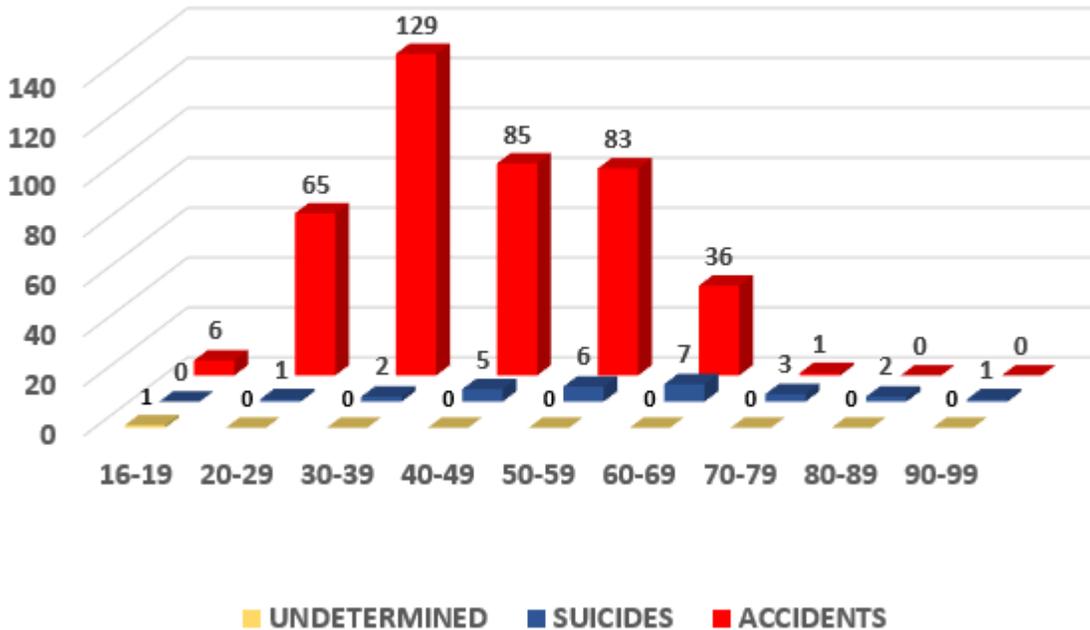


Figure 4. Number of drug deaths by age group and manner of death.

Figure 5 shows the number of drug deaths by sex and manner of death. For accidental overdose deaths, males far outnumber females whereas for suicidal overdose deaths females slightly outnumber males. There was one additional death of a male where the manner of death could not be determined.

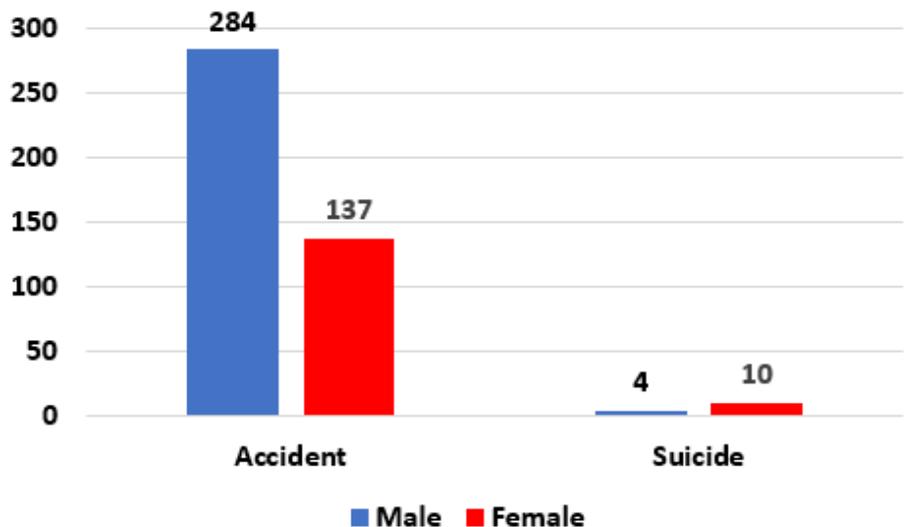


Figure 5. Number of drug deaths by manner of death and sex



2021 Drug Summary

Figure 6 shows the number of deaths by location (county) where drug use occurred, based on information obtained from the death investigation. The total number of overdoses by county does not match the total number of drug deaths in 2021 because the location of drug use was unknown in 24 deaths and there were six additional deaths where drug use occurred out of state and death occurred in a New Hampshire hospital. Not surprisingly, most fatal overdoses occurred in the most populated county of Hillsborough.

(figure courtesy of NHIAC)

Number of Overdose Deaths by County 2021

*Location where drug use occurred

- 0 - 10 (1 county)
- 11 - 20 (2 counties)
- 21 - 40 (3 counties)
- 41 - 60 (3 counties)
- 61 - 100 (0 counties)
- > 100 (1 county)

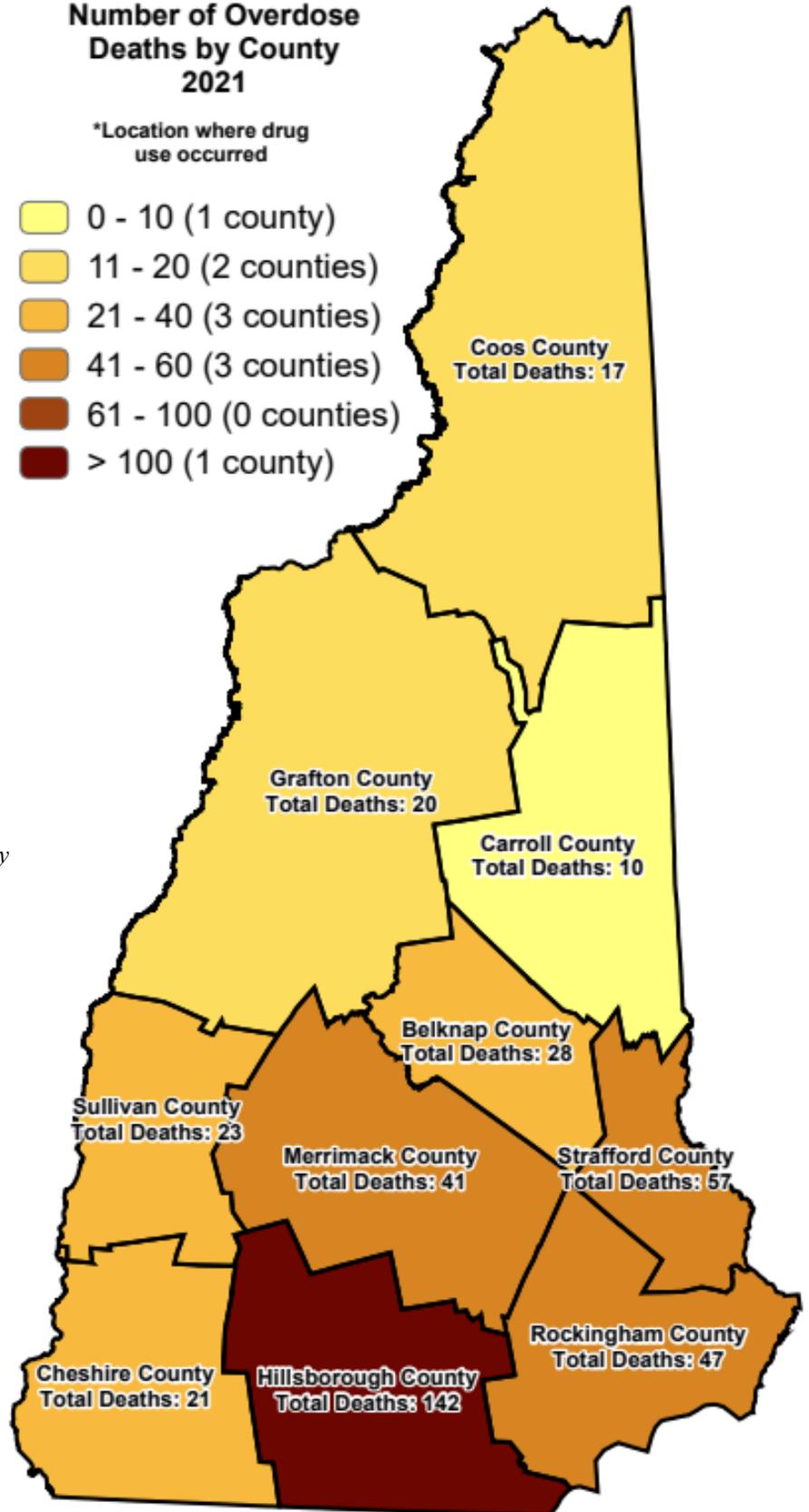


Figure 6. Drug deaths by county



2021 Drug Summary

Top 10 Fatal Overdoses by City/Town

Figure 7 shows the 10 cities/towns in New Hampshire with the highest number of fatal overdoses in 2021. The number of drug deaths in 2019 and 2020 are included for each city/town for comparison. Numbers refer to the city/town where drug use occurred, not necessarily the city/town where death occurred. There were 24 fatal overdoses in New Hampshire where the location of drug use was unknown and six deaths where drug use occurred out of state but death was pronounced in a New Hampshire hospital.

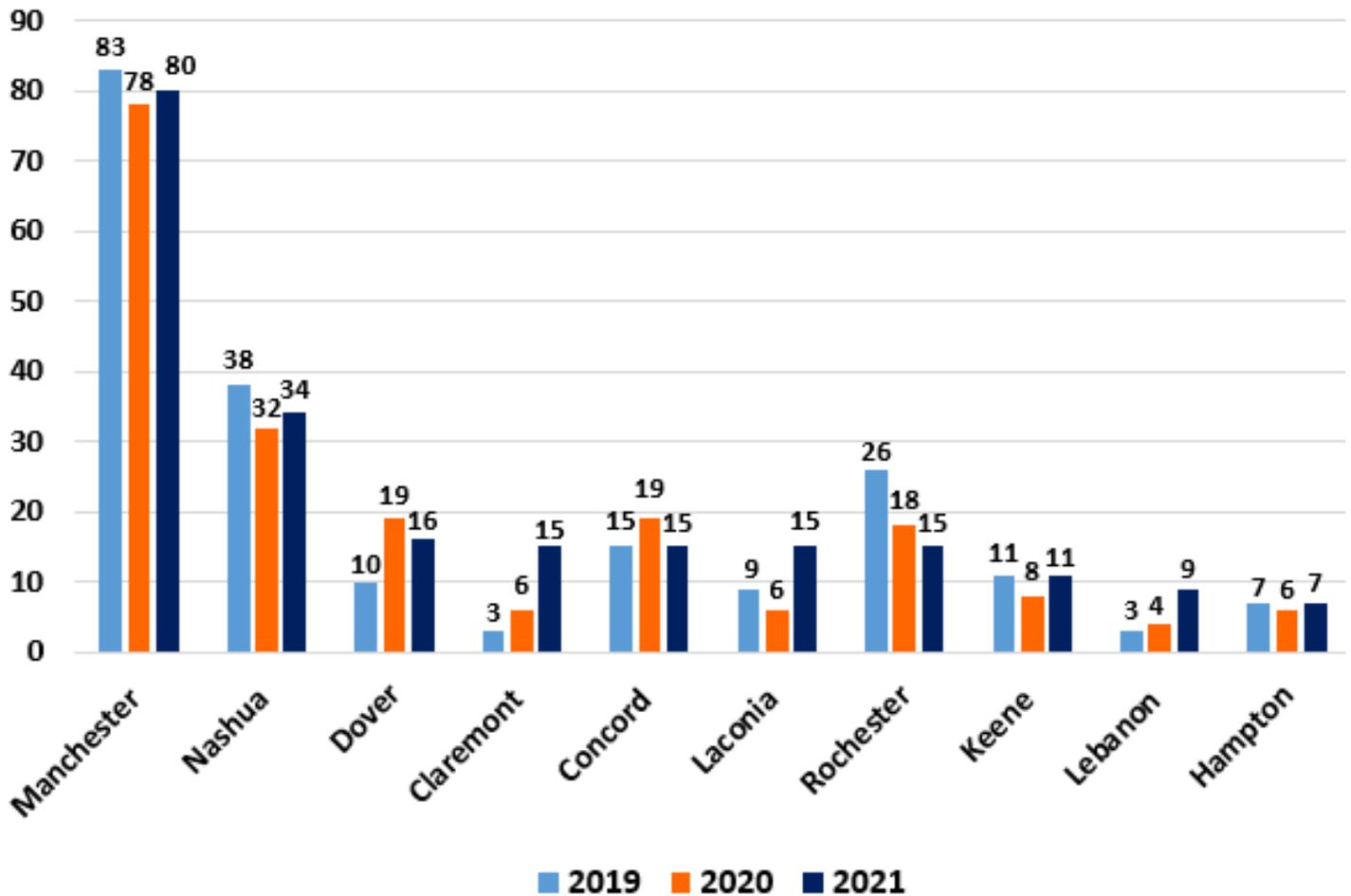


Figure 7. Top 10 fatal overdoses by city/town



2021 Drug Summary

Figure 8 shows the number of drug deaths per month for the three consecutive years 2019 through 2021. Drug deaths in 2021 outpaced those in 2019 and 2020 in five out of the seven latter months of the year.

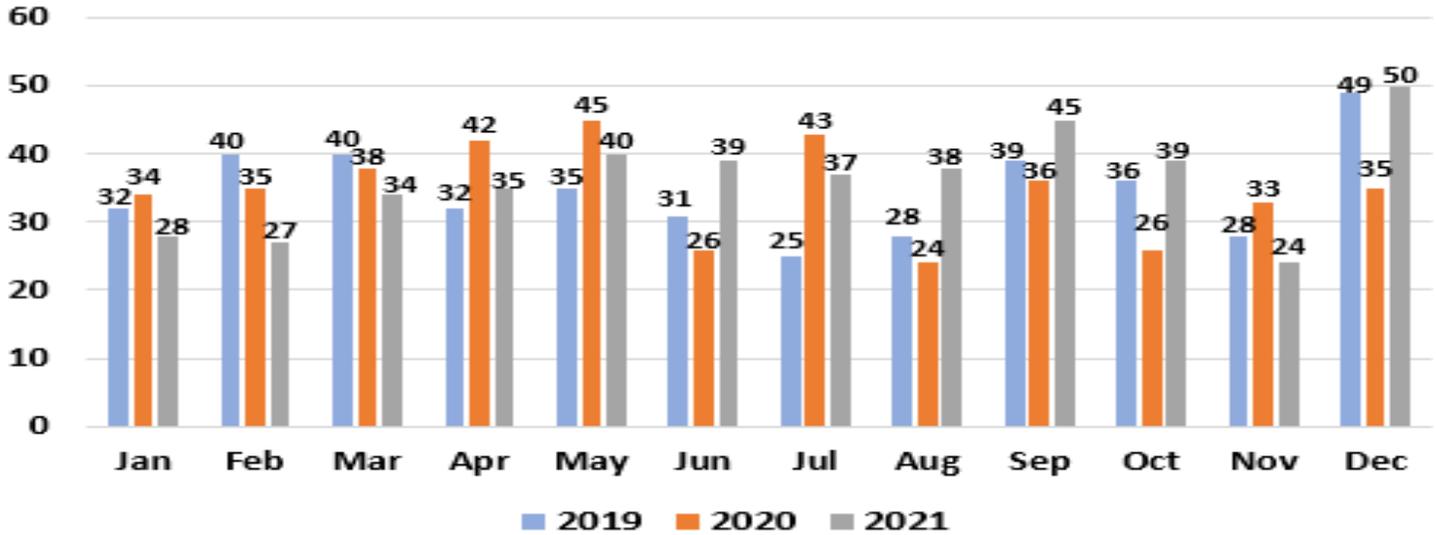
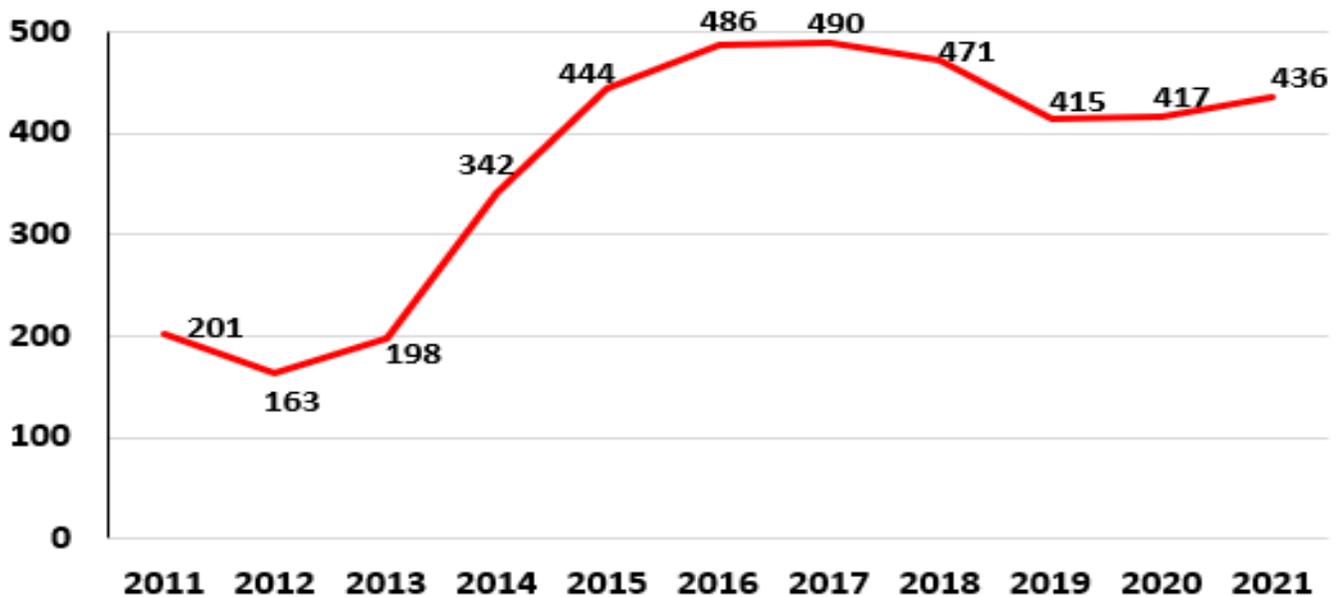


Figure 8. Number of drug deaths by month

Figure 9 shows the number of drug deaths in New Hampshire for each of the last 11 years. Drug deaths rose dramatically after 2013 with a 73% increase in 2014 and continued to increase in each subsequent year reaching a peak of 490 deaths in 2017. The promising fall in drug deaths in 2018 and 2019 ended with the COVID-19 pandemic, plateauing in 2020 and rising again in 2021. Compared to other states, however, New Hampshire drug overdose mortality improved from 2nd in 2015 to 22nd in 2020. Rankings for 2021 are not yet available but provisional data show a 22% increase in drug overdose deaths in the United States, whereas New Hampshire drug overdose deaths increased by 5% from 417 in 2020 to 436 in 2021.

Figure 9. New Hampshire Drug Deaths 2011-2021



The OCME makes every effort to ensure the accuracy of published data. However, case management software requires manual data entry and transcription errors may occur.